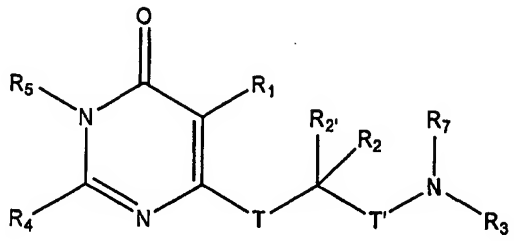
What is claimed is:

1. A compound selected from the group represented by Formula I:



Formula I

wherein:

T and T' are independently a covalent bond or optionally substituted lower alkylene;

R_1 is chosen from hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, and optionally substituted heteroaralkyl;

R_2 and $R_{2'}$ are independently chosen from hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, and optionally substituted heteroaralkyl; or R_2 and $R_{2'}$ taken together form an optionally substituted 3- to 7-membered ring;

R_3 is chosen from hydrogen, optionally substituted alkyl-, optionally substituted aryl-, optionally substituted aralkyl-, optionally substituted heteroaryl-, optionally substituted heteroaralkyl-, $-C(O)-R_6$, and $-S(O)_2-R_{6a}$;

R_4 is independently chosen from hydrogen, optionally substituted alkyl, optionally substituted alkoxy, hydroxyl, nitro, cyano, dialkylamino, alkylsulfonyl, alkylsulfonamido, alkylthio, carboxyalkyl, carboxamido, aminocarbonyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaralkyl and optionally substituted heteroaryl; and

R_5 is hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, or optionally substituted heteroaralkyl; or

R_4 taken together with R_5 form an optionally substituted 5 to 7-membered ring nitrogen-containing heterocycle, which optionally incorporates from one to two additional heteroatoms, selected from N, O, and S in the heterocycle ring;

R_6 is chosen from hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, optionally substituted heteroaralkyl, $R_{11}O$- and R_{12}-NH-;

R_{6a} is chosen from optionally substituted alkyl, optionally substituted aryl, optionally substituted alkylaryl, optionally substituted heteroaryl, optionally substituted alkylheteroaryl, and R_{12}-NH-;

R_7 is chosen from hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, and optionally substituted heteroaralkyl;

or R_7 taken together with R_3, and the nitrogen to which they are bound, form an optionally substituted 5- to 12-membered nitrogen-containing heterocycle, which optionally incorporates from one to two additional heteroatoms, selected from N, O, and S in the heterocycle ring;

or R_7 taken together with R_2 form an optionally substituted 5- to 12-membered nitrogen-containing heterocycle, which optionally incorporates from one to two additional heteroatoms, selected from N, O, and S in the heterocycle ring;

R_{11} is chosen from optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, and optionally substituted heteroaralkyl; and

R_{12} is chosen from hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted aralkyl, optionally substituted heteroaryl, and optionally substituted heteroaralkyl;

a pharmaceutically acceptable salt of a compound of Formula I;

a pharmaceutically acceptable solvate of a compound of Formula I; or

a pharmaceutically acceptable solvate of a pharmaceutically acceptable salt of a compound of Formula I.

2. A compound of claim 1 comprising one or more of the following:

one of T and T' is absent and the other is optionally substituted alkylene;

R_1 is selected from optionally substituted lower alkyl, optionally substituted aryl, or

optionally substituted aralkyl;

R_2 is optionally substituted C_1-C_4 alkyl;

$R_{2'}$ is hydrogen or optionally substituted C_1-C_4 alkyl;

R_3 is $-C(O)R_6$;

R_6 is selected from optionally substituted C_1-C_8 alkyl, optionally substituted aryl-C_1-C_4-alkyl-, optionally substituted heteroaryl-C_1-C_4-alkyl-, optionally substituted heteroaryl, optionally substituted aryl, $R_{11}O$- and R_{12}-NH-;

R_{11} is chosen from optionally substituted C_1-C_8 alkyl and optionally substituted aryl;

R_{12} is chosen from hydrogen, optionally substituted C_1-C_8 alkyl and optionally substituted aryl;

R_7 is chosen from hydrogen, C_1-C_4 alkyl; cyclohexyl; phenyl substituted with hydroxyl, C_1-C_4 alkoxy or C_1-C_4 alkyl; benzyl; and R_{16}-alkylene-;

R_{16} is hydroxyl, carboxy, (C_1-C_4 alkoxy)carbonyl-, di(C_1-C_4 alkyl)amino-, (C_1-C_4 alkyl)amino-, amino, (C_1-C_4 alkoxy)carbonylamino-, C_1-C_4 alkoxy-, or optionally substituted N-heterocyclyl- (particularly azetidinyl, morpholinyl, pyridinyl, indolyl, furanyl, pyrrolidinyl, piperidinyl or imidazolyl, each of which may be otionally substituted;

R_4 is chosen from hydrogen, hydroxyl, lower alkyl (particularly methyl), lower alkoxy (particularly methoxy) and cyano; and

R_5 is chosen from hydrogen, lower alkyl (particularly methyl), and aralkyl (particularly benzyl).

3. A compound of claim 2 comprising one or more of the following:

T and T' are absent;

R_1 is chosen from ethyl, propyl, methoxyethyl, naphthyl, phenyl, bromophenyl, chlorophenyl, methoxyphenyl, ethoxyphenyl, tolyl, dimethylphenyl, chorofluorophenyl, methylchlorophenyl, ethylphenyl, phenethyl, benzyl, chlorobenzyl, methylbenzyl, methoxybenzyl, cyanobenzyl, hydroxybenzyl, dichlorobenzyl, dimethoxybenzyl, naphthylmethyl, and (ethoxycarbonyl)ethyl;

$R_{2'}$ is hydrogen;

R_2 is optionally substituted C_1-C_4 alkyl;

R_6 is chosen from phenyl; phenyl substituted with one or more of the following substituents: halo; C_1-C_4 alkyl; C_1-C_4 alkyl substituted with hydroxy (e.g., hydroxymethyl); C_1-C_4 alkoxy; C_1-C_4 alkyl substituted with C_1-C_4 alkoxy, halo, nitro, formyl, carboxy,

cyano, methylenedioxy, ethylenedioxy, acyl (e.g., acetyl), -N-acyl (e.g., N-acetyl) or trifluoromethyl; benzyl; phenoxymethyl-; halophenoxymethyl-; phenylvinyl-; heteroaryl-; heteroaryl- substituted with C_1-C_4 alkyl or C_1-C_4 alkyl substituted with halo (e.g., CF_3); C_1-C_4 alkyl substituted with C_1-C_4 alkoxy-; and benzyloxymethyl-;

R_7 is chosen from hydrogen, methyl, ethyl, propyl, butyl, cyclohexyl, carboxyethyl, carboxymethyl, methoxyethyl, hydroxyethyl, hydroxypropyl, dimethylaminoethyl, dimethylaminopropyl, diethylaminoethyl, diethylaminopropyl, aminopropyl, methylaminopropyl, 2,2-dimethyl-3-(dimethylamino)propyl, aminoethyl, aminobutyl, aminopentyl, aminohexyl, isopropylaminopropyl, diisopropylaminoethyl, 1-methyl-4-(diethylamino)butyl, (t-Boc)aminopropyl, hydroxyphenyl, benzyl, methoxyphenyl, methylmethoxyphenyl, dimethylphenyl, tolyl, ethylphenyl, (oxopyrrolidinyl)propyl, (methoxycarbonyl)ethyl, benzylpiperidinyl, pyridinylethyl, pyridinylmethyl, morpholinylethyl morpholinylpropyl, piperidinyl, azetidinylmethyl, azetidinylethyl, azetidinylpropyl pyrrolidinylethyl, pyrrolidinylpropyl, piperidinylmethyl, piperidinylethyl, imidazolylpropyl, imidazolylethyl, (ethylpyrrolidinyl)methyl, (methylpyrrolidinyl)ethyl, (methylpiperidinyl)propyl, (methylpiperazinyl)propyl, furanylmethyl and indolylethyl; and

R_4 is hydrogen, optionally substituted alkyl, optionally substituted aryl, alkoxy, cyano, substituted amino, carbamyl, aryloxy, heteroaryloxy, heteroaryl, optionally substituted N-heterocyclyl, or trifluoromethyl.

4. A compound of claim 3 comprising one or more of the following:

R_1 is chosen from ethyl, propyl, methoxyethyl, naphthyl, phenethyl, benzyl, chlorobenzyl, methylbenzyl, methoxybenzyl, cyanobenzyl, hydroxybenzyl, dichlorobenzyl, dimethoxybenzyl, naphthylmethyl, and (ethoxycarbonyl)ethyl;

R_2 is chosen from methyl, ethyl, propyl, butyl, methylthioethyl, methylthiomethyl, aminobutyl, (CBZ)aminobutyl, cyclohexylmethyl, benzyloxymethyl, methylsulfinylethyl, methylsulfinylmethyl, and hydroxymethyl;

R_6 is chosen from phenyl, halophenyl, dihalophenyl, cyanophenyl, halo(trifluoromethyl)phenyl, hydroxymethyl-phenyl, methoxymethylphenyl, methoxyphenyl, ethoxyphenyl, carboxyphenyl, formylphenyl, ethylphenyl, tolyl, methylenedioxyphenyl, ethylenedioxyphenyl, methoxychlorophenyl, methylhalophenyl, trifluoromethylphenyl, furanyl, C_1-C_4 alkyl substituted furanyl, trifluoromethylfuranyl, C_1-C_4 alkyl substituted trifluoromethylfuranyl, benzofuranyl, thiophenyl, C_1-C_4 alkyl substituted thiophenyl,

benzothiophenyl, benzothiadiazolyl, pyridinyl, indolyl, methylpyridinyl, trifluoromethylpyridinyl, pyrrolyl, quinolinyl, picolinyl, pyrazolyl, C_1-C_4 alkyl substituted pyrazolyl, N-methyl pyrazolyl, C_1-C_4 alkyl substituted N-methyl pyrazolyl, C_1-C_4 alkyl substituted pyrazinyl, C_1-C_4 alkyl substituted isoxazolyl, benzoisoxazolyl, morpholinomethyl, methylthiomethyl, methoxymethyl, N-methyl imidazolyl, and imidazolyl;

R_7 is R_{16}-alkylene-; and

R_{16} is amino, C_1-C_4 alkylamino-, di(C_1-C_4 alkyl)amino-, C_1-C_4 alkoxy-, hydroxyl, or N-heterocyclyl.

5. A compound of claim 4 comprising one or more of the following:

R_1 is benzyl, chlorobenzyl, methylbenzyl, methoxybenzyl, cyanobenzyl, or hydroxybenzyl;

R_2 is ethyl or propyl;

R_6 is optionally substituted phenyl (especially, tolyl, halophenyl, methylhalophenyl, hydroxymethyl-phenyl, halo(trifluoromethyl)phenyl-, methylenedioxyphenyl, formylphenyl or cyanophenyl); and

R_{16} is amino.

6. A compound of claim 1 comprising one or more of the following:

one of T and T' is absent and the other is optionally substituted alkylene;

R_1 is selected from optionally substituted lower alkyl, optionally substituted aryl, or optionally substituted aralkyl;

R_2 is optionally substituted C_1-C_4 alkyl;

$R_{2'}$ is hydrogen or optionally substituted C_1-C_4 alkyl;

R_3 is $-C(O)R_6$;

R_6 is selected from optionally substituted C_1-C_8 alkyl, optionally substituted aryl-C_1-C_4-alkyl-, optionally substituted heteroaryl-C_1-C_4-alkyl-, optionally substituted heteroaryl, optionally substituted aryl, $R_{11}O$- and R_{12}-NH-;

R_{11} is chosen from optionally substituted C_1-C_8 alkyl and optionally substituted aryl;

R_{12} is chosen from hydrogen, optionally substituted C_1-C_8 alkyl and optionally substituted aryl;

R_7 is chosen from hydrogen, C_1-C_4 alkyl; cyclohexyl; phenyl substituted with hydroxyl, C_1-C_4 alkoxy or C_1-C_4 alkyl; benzyl; and R_{16}-alkylene-;

R_{16} is hydroxyl, carboxy, (C_1-C_4 alkoxy)carbonyl-, di(C_1-C_4 alkyl)amino-, (C_1-C_4 alkyl)amino-, amino, (C_1-C_4 alkoxy)carbonylamino-, C_1-C_4 alkoxy-, or optionally substituted N-heterocyclyl- (particularly azetidinyl, morpholinyl, pyridinyl, indolyl, furanyl, pyrrolidinyl, piperidinyl or imidazolyl, each of which may be otionally substituted; and

R_4 and R_5 taken together form an optionally substituted 5 to 7-membered nitrogen-containing heterocycle which optionally incorporates from one to two additional heteroatoms, selected from N, O, and S in the heterocycle ring.

7. A compound of claim 6 comprising one or more of the following:

T and T' are absent;

R_1 is chosen from ethyl, propyl, methoxyethyl, naphthyl, phenyl, bromophenyl, chlorophenyl, methoxyphenyl, ethoxyphenyl, tolyl, dimethylphenyl, chorofluorophenyl, methylchlorophenyl, ethylphenyl, phenethyl, benzyl, chlorobenzyl, methylbenzyl, methoxybenzyl, cyanobenzyl, hydroxybenzyl, dichlorobenzyl, dimethoxybenzyl, naphthylmethyl, and (ethoxycarbonyl)ethyl;

$R_{2'}$ is hydrogen;

R_2 is optionally substituted C_1-C_4 alkyl;

R_6 is chosen from phenyl; phenyl substituted with one or more of the following substituents: halo; C_1-C_4 alkyl; C_1-C_4 alkyl substituted with hydroxy (e.g., hydroxymethyl); C_1-C_4 alkoxy; C_1-C_4 alkyl substituted with C_1-C_4 alkoxy, halo, nitro, formyl, carboxy, cyano, methylenedioxy, ethylenedioxy, acyl (e.g., acetyl), -N-acyl (e.g., N-acetyl) or trifluoromethyl; benzyl; phenoxymethyl-; halophenoxymethyl-; phenylvinyl-; heteroaryl-; heteroaryl- substituted with C_1-C_4 alkyl or C_1-C_4 alkyl substituted with halo (e.g., CF_3); C_1-C_4 alkyl substituted with C_1-C_4 alkoxy-; and benzyloxymethyl-;

R_7 is chosen from hydrogen, methyl, ethyl, propyl, butyl, cyclohexyl, carboxyethyl, carboxymethyl, methoxyethyl, hydroxyethyl, hydroxypropyl, dimethylaminoethyl, dimethylaminopropyl, diethylaminoethyl, diethylaminopropyl, aminopropyl, methylaminopropyl, 2,2-dimethyl-3-(dimethylamino)propyl, aminoethyl, aminobutyl, aminopentyl, aminohexyl, isopropylaminopropyl, diisopropylaminoethyl, 1-methyl-4-(diethylamino)butyl, (t-Boc)aminopropyl, hydroxyphenyl, benzyl, methoxyphenyl, methylmethoxyphenyl, dimethylphenyl, tolyl, ethylphenyl, (oxopyrrolidinyl)propyl, (methoxycarbonyl)ethyl, benzylpiperidinyl, pyridinylethyl, pyridinylmethyl, morpholinylethyl morpholinylpropyl, piperidinyl, azetidinylmethyl, azetidinylethyl, azetidinylpropyl

pyrrolidinylethyl, pyrrolidinylpropyl, piperidinylmethyl, piperidinylethyl, imidazolylpropyl, imidazolylethyl, (ethylpyrrolidinyl)methyl, (methylpyrrolidinyl)ethyl, (methylpiperidinyl)propyl, (methylpiperazinyl)propyl, furanylmethyl and indolylethyl; and

R_4 and R_5 taken together form an optionally substituted pyridinyl, pyridazinyl, pyrimidinyl, pyrazinyl, piperidinyl, piperazinyl, hexahydropyrimidinyl, piperazinyl, morpholinyl, pyrrolyl, pyrazolyl, imidazolyl, dihydroisoxazolyl, or dihydrooxazolyl ring.

8. A compound of claim 1 comprising one or more of the following:

one of T and T' is absent and the other is optionally substituted alkylene;

R_1 is selected from optionally substituted lower alkyl, optionally substituted aryl, or optionally substituted aralkyl;

R_2 is optionally substituted C_1-C_4 alkyl;

$R_{2'}$ is hydrogen or optionally substituted C_1-C_4 alkyl;

R_3 taken together with R_7 and the nitrogen to which they are bound, forms an optionally substituted imidazolyl; and

R_4 is chosen from hydrogen, hydroxyl, lower alkyl, lower alkoxy and cyano; and R_5 is chosen from hydrogen, lower alkyl, and aralkyl; or R_4 and R_5 taken together form an optionally substituted 5 to 7-membered nitrogen-containing heterocycle which optionally incorporates from one to two additional heteroatoms, selected from N, O, and S in the heterocycle ring.

9. A compound of claim 1 comprising one or more of the following:

one of T and T' is absent and the other is optionally substituted alkylene;

R_1 is selected from optionally substituted lower alkyl, optionally substituted aryl, or optionally substituted aralkyl;

R_2 is optionally substituted C_1-C_4 alkyl;

$R_{2'}$ is hydrogen or optionally substituted C_1-C_4 alkyl;

R_3 taken together with R_7 and the nitrogen to which they are bound, forms an optionally substituted imidazolinyl; and

R_4 is chosen from hydrogen, hydroxyl, lower alkyl, lower alkoxy and cyano; and R_5 is chosen from hydrogen, lower alkyl, and aralkyl; or R_4 and R_5 taken together form an optionally substituted 5 to 7-membered nitrogen-containing heterocycle which optionally incorporates from one to two additional heteroatoms, selected from N, O, and S in the heterocycle ring.

10. A compound of claim 1 comprising one or more of the following:

one of T and T' is absent and the other is optionally substituted alkylene;

R_1 is selected from optionally substituted lower alkyl, optionally substituted aryl, or optionally substituted aralkyl;

R_2 is optionally substituted C_1-C_4 alkyl;

$R_{2'}$ is hydrogen or optionally substituted C_1-C_4 alkyl;

R_3 taken together with R_7 and the nitrogen to which they are bound, forms an optionally substituted diazepinone; and

R_4 is chosen from hydrogen, hydroxyl, lower alkyl, lower alkoxy and cyano; and R_5 is chosen from hydrogen, lower alkyl, and aralkyl; or R_4 and R_5 taken together form an optionally substituted 5 to 7-membered nitrogen-containing heterocycle which optionally incorporates from one to two additional heteroatoms, selected from N, O, and S in the heterocycle ring.

11. A compound of claim 1 wherein:

R_1 is benzyl, chlorobenzyl, methylbenzyl, methoxybenzyl, cyanobenzyl, or hydroxybenzyl;

$R_{2'}$ is hydrogen;

R_2 is optionally substituted C_1-C_4 alkyl;

R_3 is $-C(O)R_6$;

R_6 is optionally substituted phenyl;

R_7 is R_{16}-alkylene-;

R_{16} is amino, C_1-C_4 alkylamino-, di(C_1-C_4 alkyl)amino-, C_1-C_4 alkoxy-, hydroxyl, or N-heterocyclyl;

R_4 is chosen from hydrogen, hydroxyl, lower alkyl (particularly methyl), lower alkoxy (particularly methoxy) and cyano; and

R_5 is chosen from hydrogen, lower alkyl (particularly methyl), and aralkyl (particularly benzyl).

12. A compound of claim 1 wherein:

R_1 is benzyl, chlorobenzyl, methylbenzyl, methoxybenzyl, cyanobenzyl, or hydroxybenzyl;

$R_{2'}$ is hydrogen;

R_2 is optionally substituted C_1-C_4 alkyl;

R_3 is $-C(O)R_6$;

R_6 is $R_{12}NH$-;

R_{12} is chosen from hydrogen, C_1-C_4 alkyl; cyclohexyl; and optionally substituted phenyl;

R_7 is R_{16}-alkylene-,

R_{16} is amino, C_1-C_4 alkylamino-, di(C_1-C_4 alkyl)amino-, C_1-C_4 alkoxy-, hydroxyl, or N-heterocyclyl;

R_4 is chosen from hydrogen, hydroxyl, lower alkyl (particularly methyl), lower alkoxy (particularly methoxy) and cyano; and

R_5 is chosen from hydrogen, lower alkyl (particularly methyl), and aralkyl (particularly benzyl).

13. A compound of claim 1 wherein:

R_1 is benzyl, chlorobenzyl, methylbenzyl, methoxybenzyl, cyanobenzyl, or hydroxybenzyl;

R_2' is hydrogen;

R_2 is optionally substituted C_1-C_4 alkyl;

R_3 is $-C(O)R_6$;

R_6 is $R_{11}O$-;

R_{11} is chosen from optionally substituted C_1-C_8 alkyl and optionally substituted aryl;

R_7 is R_{16}-alkylene-;

R_{16} is amino, C_1-C_4 alkylamino-, di(C_1-C_4 alkyl)amino-, C_1-C_4 alkoxy-, hydroxyl, or N-heterocyclyl;

R_4 is chosen from hydrogen, hydroxyl, lower alkyl (particularly methyl), lower alkoxy (particularly methoxy) and cyano; and

R_5 is chosen from hydrogen, lower alkyl (particularly methyl), and aralkyl (particularly benzyl).

14. A compound of claim 1 that is

N-(3-Amino-propyl)-N-[1-(5-benzyl-2-methyl-6-oxo-1,6-dihydro-pyrimidin-4-yl)-2-methyl-propyl]-4-methyl-benzamide;

N-(3-Amino-propyl)-N-[1-(5-benzyl-1,2-dimethyl-6-oxo-1,6-dihydro-pyrimidin-4-yl)-2-methyl-propyl]-4-methyl-benzamide;

N-(3-Amino-propyl)-N-[1-(3-benzyl-4-oxo-4H-pyrido[1,2-a]pyrimidin-2-yl)-2-methyl-propyl]-4-methyl-benzamide; or
N-(3-Amino-propyl)-N-[1-(3-benzyl-8-chloro-4-oxo-4H-pyrido[1,2-a]pyrimidin-2-yl)-2-methyl-propyl]-4-methyl-benzamide.

15. A compound of any of the above claims wherein the stereogenic center to which R_2 and $R_{2'}$ is attached is of the R configuration.

16. A composition comprising a pharmaceutical excipient and a compound, salt, or solvate thereof of any one of claims 1-14.

17. A composition according to claim 16, wherein said composition further comprises a chemotherapeutic agent other than a compound of Formula I or a pharmaceutical salt or solvate thereof.

18. A composition according to claim 17 wherein said composition further comprises a taxane.

19. A composition according to claim 17, wherein said composition further comprises a vinca alkaloid.

20. A composition according to claim 17, wherein said composition further comprises a topoisomerase I inhibitor.

21. A method of modulating KSP kinesin activity which comprises contacting said kinesin with an effective amount of a compound according to any one of claims 1 to 13, or a pharmaceutically acceptable salt or solvate thereof.

22. A method of inhibiting KSP which comprises contacting said kinesin with an effective amount of a compound according to any one of claims 1 to 13, or a pharmaceutically acceptable salt or solvate thereof.

23. A method for the treatment of a cellular proliferative disease comprising

administering to a subject in need thereof a compound according to any one of claims 1-13, or a pharmaceutically acceptable salt or solvate thereof.

24. A method for the treatment of a cellular proliferative disease comprising administering to a subject in need thereof a composition according to any one of claims 16-20.

25. A method according to claim 23 or claim 24 wherein said disease is selected from the group consisting of cancer, hyperplasias, restenosis, cardiac hypertrophy, immune disorders, and inflammation.

26. The use, in the manufacture of a medicament for treating cellular proliferative disease, of a compound according to any one of claims 1-13, or a pharmaceutically acceptable salt or solvate thereof

27. The use of a compound as defined in claim 26 for the manufacture of a medicament for treating a disorder associated with KSP kinesin activity.